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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/825,061 | 04/04/2001 | Mikiya Suzuki | 32011-171032 | 1979 |

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| EXAMINER |
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PAYNE, DAVID C

| ART UNIT | PAPER NUMBER |
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2633

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DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,061

Applicant(s)

SUZUKI, MIKIYA

Examiner

David C. Payne

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 18 May 2004 have been fully considered but they are not persuasive.
2. Regarding applicant's argument that claim 1 is written in means plus function language, and that the claim must be interpreted under 35 USC 112, paragraph 6 and therefore the defect avoidance means should be interpreted within view of the specification as noted. However, MPEP 2183 (D) states an examiner may make a prima facie case of equivalence if the prior art element is a structural equivalent of the corresponding element disclosed in the specification.

Accordingly, applicant's defect avoidance means merely routes a wavelength to an auxiliary card in the event of failure of a working card. Likewise, Fee reroutes signals to different lines, transmitters and receivers based on failure of components as evidence in Figure 2. Since these components are known to exist on some line card type of structure it is obvious that switching among line or components is the equivalent of switching to an auxiliary card.

3. Regarding claim 3, Suzuki disclosed that functional state information is collected in an operation center, which is understood to be external to the terminal equipment.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2633

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee US 5,777,761 (Fee).

Re claim 1, Fee disclosed

A wavelength division multiplex transmission system which distributes transmission signals to be transmitted among a plurality of wavelength components, converts said signals into WDM signals (e.g., col./line: 4/44-46), and transmits said WDM signals to a WDM transmission network, and which restores WDM signals from said WDM transmission network into said transmission signals (e.g., col./line: 2/28-35); comprising an optical transmission device and optical receiving device, in which said optical transmission device comprises an operating-system optical transmission unit and a standby-system optical transmission unit (e.g., col./line: 4/44-50), and said optical receiving device comprises an operating-system optical receiving unit and a standby-system optical receiving unit (e.g., col./line: 4/44-50); wherein either said operating-system optical transmission unit, or said standby-system optical transmission unit, or both, have optical transmission unit internal defect avoidance means which, upon the occurrence of a prescribed number or fewer of wavelength component transmission defects, executes avoidance of defects within said optical transmission unit (e.g., col./line: 2/15-25). While Fee does not disclose the exact switching of auxiliary line cards for defect avoidance as does the applicant. Fee has disclosed equivalent structural elements, as does the applicant, see for example Figure 2. It would have been obvious to one of ordinary skill in the art at the time of

Art Unit: 2633

invention that the components, which are duplicated and used in an auxiliary function as in Fee, could exist on separate line cards for the purposes of fault isolation.

Regarding claim 2, Fee disclosed

A wavelength division multiplex transmission system in which said optical transmission unit internal defect avoidance means distributes the transmission signals which had been distributed to the wavelength component related to a defect to another, normal wavelength component, and causes said signals to be transmitted.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee US 5,777,761 (Fee) in view of Suzuki US 5,150,243 (Suzuki).

Regarding claim 3, Fee does not disclose

when said defect detection means detects a defect, sends defect occurrence member information to an external maintenance member management terminal which performs management of maintenance members, supply processing, or similar.

Suzuki disclosed an external central operations system for managing failed

Art Unit: 2633

components (e.g., col./line: 2/5-15, 2/30-45). It would have been obvious to one of ordinary skill in the art at the time of invention to use a central operations system to collect fault information for the benefit of providing a central place to monitor the operational state of the entire network as discussed in Suzuki see col./line: 1/38-42.

Regarding claim 4, the modified invention of Fee and Suzuki disclosed

A communication device in which said defect occurrence member transmission means sends said defect occurrence member information to the transmission network used by the communication device for normal communication (e.g., col./line: 3/30-37)

Conclusion


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp


David C. Payne
Patent Examiner
Art Unit 2633